



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,894	04/16/2004	Kenneth J. Cotton	620SC [2630.3176.001]	1424
7590	01/11/2005		EXAMINER	
William H. Francis Reising, Ethington, Barnes, Kisselle, P.C. P.O. Box 4390 Troy, MI 48099-4390				DINH, PHUONG K
		ART UNIT		PAPER NUMBER
		2839		

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/826,894	COTTON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Phuong KT Dinh	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 10 November 2004.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-7 and 9-35 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7 and 9-35 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 11/03.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, "the second end is adapted to receive a mating material for a wire" is unclear.

Claim 14, "the first and second ends are each adapted to receive a mating material for a wire" is unclear.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6, 10-12, 15,17-22, 24, 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051).

5. Regarding 1, 22, 26-35 Zeigler, Jr. (U. S. Patent 3,678,447), see figures 1-3, discloses a pass through electrical connector assembly comprising: a body 80; at least one through hole formed in the body and a pin 34 formed into the through hole and

retained in the body, the pin 34 having first and second ends each constructed to receive a separate wire 56; an intermediate portion 54 constructed to separate the wires 56 and provide and between the wires and the pin 34; a tip 36 adjacent the first end of the pin, the tip having at least one barb (near to the lead line 88) constructed to engage the body when the pin is forced into the through-hole; a head 36 formed adjacent the second end of the pin the lead having a shoulder connected to engage the body when the pin is formed into the through hole and a circumferentially continuous surface press fit into the through hole of the body and forming a seal between the pin and the body.

Zeigler, Jr. (U. S. Patent 3,678,447) discloses the claimed invention but does not a separated wires. Zeigler, Jr. (U. S. Patent 3,533,051) discloses a separated wires at 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler, Jr. (U. S. Patent 3,678,447) to provide a separated wires as taught by Zeigler, Jr. (U. S. Patent 3,533,051) so as to provide more directly electrical connection.

6. Regarding claims 6, 24, Zeigler (U. S. Patent 3,678,447) discloses the body comprises a snap latch 30 constructed to retain the body in the flange.

7. Regarding claim 10, Zeigler (U. S. Patent 3,678,447) discloses the pin has a separate blind hole (near to the leadline 30) opening into each of the ends of the pin.

8. Regarding claim 11, Zeigler (U. S. Patent 3,678,447) discloses the pin has a blind opening into one of the first and second ends and the other of the ends is solid.

9. Regarding claim 12, Zeigler (U. S. Patent 3,678,447) discloses the first and second ends of the pin are solid.

10. Regarding claim 15, Zeigler (U. S. Patent 3,678,447) discloses the circumferential surface is cylindrical.

11. Regarding claim 17, Zeigler (U. S. Patent 3,678,447) discloses the tip has a frusto conical portion at the first end to facilitate insertion of the pin into the through hole.

12. Regarding claim 18, Zeigler (U. S. Patent 3,678,447) discloses the tip is diametrically smaller than the circumferentially continuous surfaces of the pin.

13. Regarding claim 19, Zeigler (U. S. Patent 3,678,447), see figures 1-3, discloses the maximum diameter of the barb is larger than the maximum diameter of the circumferentially continuous surface of the pin.

14. Regarding claims 20-21, Zeigler (U. S. Patent 3,678,447), see figures 1-3, discloses the circumferentially continuous surface of the pin is diametrically larger than the through hole pin to the pin being forced into the through hole.

15. Claims 2-4, 23, 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051).

16. Regarding claims 2, 3 and 23, Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) disclose the claimed invention except for the body is housing constructed of plastic and the body is housing connected of synthetic rubber. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the body is housing constructed of plastic and the body is housing connected of synthetic rubber, since it has been held to be within the general skill in a

worker in the art to select a know material on the basis of suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

17. Regarding claims 4 and 25, Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) disclose the claimed invention except for the body is made of a low permeation material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the body is made of a low permeation material, since it has been held to be within the general skill in a worker in the art to select a know material on the basis of suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

18. Claims 5, 7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) and further in view of Mizuno (U. S. Patent 4,373,112).

19. Regarding claim 5, 7, 9, Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) disclose the claimed invention except for discloses a flange having a hole complementary to the body and the body is received in the hole in the flange and sealed to the flange. Mizumo discloses a flange 40 and seal to the flange at 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) to provide the flange and seal to the flange so as to hold and seal connector to a panel.

20. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zeigler, Jr. (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) and further in view of Lechmann (U. S. Patent 6,264,508).

21. Regarding claim 16, Zeigler (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) disclose the claimed invention except for the circumferential surface is tapered. Lechmann, see figure 1, discloses the circumferential surface is tapered. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Zeigler (U. S. Patent 3,678,447) in view of Zeigler, Jr. (U. S. Patent 3,533,051) to provide the circumferential surface is tapered so as to help to guide the pin.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong KT Dinh whose telephone number is 571-272-2090. The examiner can normally be reached on 8 -5, 5 days a week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuong Dinh  
January 06, 2005.